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10/091,108	03/05/2002	Scott Lee Wellington	TH-1759X (US)	5886

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EXAMINER	
LEUNG, JENNIFER A	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,108	WELLINGTON ET AL.	
	Examiner	Art Unit	
	Jennifer A. Leung	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2005 and 26 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-8,10-35 and 40-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8,10-35 and 40-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendments submitted on September 15, 2005 and October 26, 2005 have been received and carefully considered. The changes made to the specification are acceptable. Claims 3, 9, 36-39 and 46 are cancelled. Claims 1, 2, 4-8, 10-35 and 40-45 remain active.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on October 16, 2002 fails to comply with 37 CFR 1.98(a)(2) because a copy of the cited "Search Report dated 10/09/02" has not been provided. The IDS has been placed in the application file, but the cited search report has not been considered.

Claim Objections

3. Claims 1, 7, 12, 23 and 44 are objected to because of the following informalities:

In claim 1, line 2: a comma --,-- should be inserted after "hydrocarbon". It is further suggested to change the transitional phrase "that includes" to --comprising--.

In claim 7, line 2: "or" (both recitations) should be changed to --and-- to place the claim in proper Markush format.

In claim 12, line 4: "and" should be deleted, and "or" should be changed to --and-- to place the claim in proper Markush format.

In claim 23, lines 3-4: "%w" (three recitations) should be changed to --wt%--.

In claim 44, line 1: "further comprising" should be changed to --wherein--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-8, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Said claims improperly depend from a cancelled claim (i.e., claim 4 depends from cancelled claim 3).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 2, 4-8, 10-15, 17, 19-21, 25, 29, 30, 40-43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minet et al. (US 5,229,102) in view of Mikus et al. (WO 99/18392).

Regarding claim 1, Minet et al. (FIG. 1; column 3, line 55 to column 5, line 6) discloses an apparatus comprising:

a) a steam reforming reactor **10** comprising two concentric sections including a larger outside section (i.e., containing burners **14**) and a smaller inside section (i.e., interior **11a**, defined by membrane tube **11**) and an annulus containing reforming catalyst between said sections (i.e., annulus **16** containing reforming catalyst **17**);

b) said annulus section **16** having an inlet for steam and vaporizable hydrocarbon (i.e., via connection **15**), a flow path for hydrogen and by-product gases in said annulus section **16**, and an outlet for said by-product gases (i.e., via point **D**);

c) said outside section being in heat transferring contact with said annulus section **16** (i.e., via heat transfer through metallic tube **13**), and having a heating means comprising inlets for fuel gas and combustion air in communication with a plurality of vertically spaced burners **14** for distributing radiant heat to said annulus section **16** via the tube **13**; and

d) said inside section **11a** having a hydrogen-selective, hydrogen-permeable membrane (i.e., located on catalytic ceramic membrane tube **11**) positioned either on the inside or outside of said inside section **11a**, and an outlet for hydrogen (i.e., via pipe connection **12a**) which permeates through said membrane **11** from said annulus section **16** into said inside section **11a** and passes through said outlet **12a**.

Minet et al. is silent as to whether the heating means may instead comprise an inlet for preheated air or other oxidant and a plurality of tubes for fuel gas, said tubes having openings through which the fuel gas flows and is mixed with said air or other oxidant resulting in flameless distributed combustion. In contrast, the combustion disclosed by Minet et al. is not flameless, as evidenced by the flames generated by burners **14**.

Mikus et al. (FIG. 1, 3; page 8, line 3 to page 10, line 15; page 10, line 25 to page 11, line 3) teaches a heating means comprising an inlet for preheated air or other oxidant (i.e., inlet **2**) and a plurality of tubes for fuel gas (i.e., fuel conduit **5**, shown in plurality in FIG. 3), said tubes having openings through which the fuel gas flows (i.e., fuel nozzles **6**) and is mixed with said air or other oxidant (i.e., within the oxidation reaction chamber **1**) resulting in "flameless distributed combustion," (specifically, page 8, lines 10-17) whereby uniform tailored, controlled heat is transferred to an adjacent process chamber **8**. The process chamber **8** may comprise a catalytic steam reformer (page 13, lines 17-25; page 16, line 34 to page 17, line 30). It would have been

obvious for one of ordinary skill in the art at the time the invention was made to substitute the heating means of Mikus et al. for the heating means in the apparatus of Minet et al., on the basis of suitability for the intended use, because the "flameless distributed combustion" provides a controllable heat flux into a process chamber, from a heat source which has a uniform temperature, and a very low creation of NOx, as taught by Mikus et al. (page 5, lines 1-7).

Regarding claims 2 and 43, Minet et al. further discloses an inlet adapted to convey a sweep gas comprising steam (i.e., H_2O steam supplied to the interior **11a** of the membrane tube **11** via connection **12** at point **B**; FIG. 1; column 4, lines 17-25).

Regarding claims 4 and 5, Minet et al. discloses the reforming catalyst **17** comprises at least one Group VIII transition metal; in particular, nickel metal (column 3, lines 67-68).

Regarding claims 6-8, 10 and 11, Minet et al. further discloses that typical reforming catalysts comprise nickel deposited on a support comprising oxides of Group IIIA; in particular, alumina support materials (column 1, lines 19-41). It would have been obvious for one of ordinary skill in the art at the time the invention was made to select the typical reforming catalyst for the reforming catalyst **17** in the apparatus of Minet et al., because the use of such catalysts is well known in the art of steam reforming, as evidenced by Minet et al.

Regarding claim 12, Minet et al. discloses the hydrogen-permeable selective membrane (i.e., on catalytic ceramic membrane tube **11**; FIG. 1) comprises one or more Group VIII transition metals or alloys; in particular, nickel (column 4, lines 3-25; column 6, lines 9-17).

Regarding claims 13-15 and 17, Minet et al. discloses the hydrogen permeable membrane (i.e., on catalytic ceramic membrane tube **11**; FIG. 1; column 4, lines 3-25) being situated on a porous ceramic support comprising oxides of Group IIA; in particular, alumina (i.e., the nickel or

other suitable catalytic material as well as Layer 1, Layer 2 and Layer 3 being situated on a support of alpha alumina; see TABLE 2).

Regarding claims 19-21, Minet et al. discloses said membrane support (i.e., a Support of alpha alumina; see Table 2; column 4, lines 3-25) provides an intermediate layer (i.e., Layer 1, or Layer 2, or Layer 3; see Table 2) between the membrane and the catalyst **17**. The support of alumina inherently limits heat transfer to the membrane, as defined by applicant in section [0048] of the specification.

Regarding claim 25, Minet et al. discloses the membrane has a thickness in the range of 10 Angstroms to 150 μm (i.e., see Table 2, column 4, lines 3-25, wherein the sum of Layer 1, Layer 2, and Layer 3 is about 85 microns in thickness).

Regarding claims 29 and 30, Minet et al. further discloses the steam reforming reactor **10** may be used as a hydrogen generator for supplying hydrogen, via outlet **12a**, for the production of ammonia, methanol or hydrocracking of hydrocarbons (column 4, lines 52-57).

Regarding claims 40-42, Minet et al. further discloses the steam reformer tube **13** being constructed from high alloy material, such as SS304, SS310, SS316, or the like (column 3, line 68 to column 4, line 2). For instance, the material SS304, a.k.a. AISI 304 stainless steel, comprises about 18% Cr and about 8% Ni, with the balance comprising iron.

Regarding claim 45, as best understood, the modified apparatus of Minet et al. structurally meets the claim because the modified apparatus includes all of the claimed structural elements. The recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

6. Claims 16, 18, 22 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minet et al. (US 5,229,102) in view of Mikus et al. (WO 99/18392), as applied to claims 1, 12 and 13 above, and further in view of Lin et al. (EP 1 024 111).

Regarding claim 16, 18 and 22, Minet et al. is silent as to the whether the hydrogen-permeable membrane **11** may instead comprise a support of porous metal, and/or a membrane selected from palladium and palladium alloys. Lin et al. (FIG. 1) teaches a hydrogen-permeable membrane (i.e., on hydrogen-permeable membrane tube **14**) located within a steam reforming section containing reforming catalyst **13**, wherein the hydrogen-permeable membrane includes a porous substrate selected from porous stainless steel or porous ceramic material, and a membrane comprising a thin metal layer of palladium or a palladium alloy (see section [0012]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute the hydrogen-permeable membrane of Lin et al. for the hydrogen-permeable membrane **11** in the modified apparatus of Minet et al., on the basis of suitability for the intended use thereof, because the hydrogen-permeable membrane of Lin et al. provides a high hydrogen permeation flux that allows both the reforming temperature and the transmembrane pressure different to be reduced to a lower level. The reduced temperature and transmembrane pressure difference can provide the benefits of using less expensive material for the entire reactor, saving heat energy, and reducing undesirable effects on the mechanical strength and stability of the hydrogen-permeable membrane, as taught by Lin et al. (see section [0015]). In any event, the substitution of known equivalent structures involves only ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958).

Regarding claims 25-27, Lin et al. further teaches that the hydrogen-permeable membrane (i.e., the thin metal layer) has a thickness of 1 to 20 μm (section [0012]), which lies within the claimed range.

Regarding claim 28, Lin et al. further teaches that the hydrogen-permeable membrane has a measured permeability of hydrogen in the range of 3-10 m^3/m^2-h-$atm^{0.5}$ (section [0019]), which lies within the claimed range.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minet et al. (US 5,229,102) in view of Mikus et al. (WO 99/18392) and Lin et al. (EP 1 024 111), as applied to claims 1, 12 and 22 above, and further in view of Juda et al. (US 5,904,754) or Rosset (US 2,958,391) or Behr et al. (US 4,496,373).

The combined teachings of Minet et al., Mikus et al., and Lin et al. are silent as to the hydrogen-permeable membrane comprising at least one of the instantly claimed Pd alloys. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute at least one of the instantly claimed alloys for the hydrogen-permeable membrane in the modified apparatus of Minet et al., on the basis of suitability for the intended use thereof, because the substitution of known equivalent structures for providing the same function of hydrogen permeation would involve only ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958). Juda et al. (column 3, line 1 to column 4, line 49) teaches a known hydrogen-permeable membrane comprising an alloy of Pd with 40% copper for use as a wall connecting high and low pressure chambers of a hydrogen generator. Rosset (column 2, lines 16-44) teaches another known hydrogen-permeable

membrane comprising an alloy of Pd with small amounts up to about 60% silver, or preferably from about 25 to about 40 atom percent silver. Behr et al. (column 1, line 42 to column 2, line 8) teaches yet another known hydrogen-permeable membrane comprising an alloy of Pd with at least 7 % Y, or at least 45 % Cu.

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minet et al. (US 5,229,102) in view of Mikus et al. (WO 99/18392), as applied to claims 1 and 12 above, and further in view of Rosset (US 2,958,391).

The combined teachings of Minet et al. and Mikus et al. are silent as to the hydrogen-permeable membrane being selected from platinum or platinum alloys. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute a membrane selected from platinum or platinum alloys for the hydrogen-permeable membrane in the modified apparatus of Minet et al., on the basis of suitability for the intended use thereof, because the substitution of known equivalent structures for providing the same function of hydrogen permeation would involve only ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958). Rosset teaches that hydrogen-permeable membranes comprising platinum or platinum alloys are well known in the art. In particular, platinum may be employed to improve the permeability of the membrane to hydrogen without sacrificing purity of the gaseous product or without weakening the structural properties of the membrane (column 2, lines 31-39).

9. Claims 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minet et al. (US 5,229,102) in view of Mikus et al. (WO 99/18392), as applied to claim 1 above, and further

in view of Topsoe (US 5,169,717).

Regarding claim 31, Minet et al. discloses that the steam reforming reactor **10** generates hydrogen for applications requiring higher pressures, such as the production of ammonia (column 4, lines 52-57). Minet et al., however, is silent as to the apparatus for steam reforming **10** being in communication with a fuel cell.

Topsoe (FIG. 3, 4; column 6, line 32 to column 7, line 39) teaches an apparatus comprising a steam reforming reactor (i.e., for primary reforming, or secondary reforming) located in the "front end" portion **24** of a plant for the production of ammonia. In addition, the apparatus comprises a fuel cell **29** in communication with the steam reforming reactor.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a fuel cell to the modified apparatus of Minet et al., on the basis of suitability for the intended use thereof, because incorporating a fuel cell into the ammonia process improves the overall energy balance of the process by offering a possibility for using a purge gas containing hydrogen as well as an off-gas of carbon dioxide to generate electricity, as taught by Topsoe (column 1, lines 17-55).

Regarding claims 32 and 33, Topsoe teaches that a suitable fuel cell comprises a high pressure molten carbonate fuel cell (i.e., a Molten Carbon Fuel Cell, MCFC, operating at pressures up to 120 psia, or an Integral Reforming Molten Carbonate Cell, IRMCFC, operating at pressures up to 120 psia; see Table 1; column 1, line 57 to column 2, line 66).

Regarding claim 34, Minet et al. is silent as to the steam reformer **10** being "scalable and easily adjustable to any size fuel cell." In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to configure the steam reformer to be

scalable and easily adjustable to any size fuel cell in the modified apparatus of Minet et al., on the basis of suitability for the intended use, because it has been held that changes in size involve only ordinary skill in the art. *In re Rose*, 220 F.2d 459, 463, 105 USPQ 237, 240 (CCPA 1955).

Regarding claim 35, Minet et al. is silent as to the steam reformer **10** being mobile. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to configure the steam reformer to be mobile in the modified apparatus of Minet et al., on the basis of suitability for the intended use, because making an apparatus portable was held to have been obvious, *In re Lindberg* 93 USPQ 23 (CCPA 1952).

10. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minet et al. (US 5,229,102) in view of Mikus et al. (WO 99/18392), as applied to claim 1 above, and further in view of Edlund (US 5,861,137).

Minet et al. is silent as to the apparatus further comprising a methanation catalyst packed within said inside section **11a**. Edlund (FIG. 3; column 5, lines 9-40) teaches a steam reforming reactor **12** including an annulus (i.e., annular reforming region **62**) containing reforming catalyst **102** and an inside section defined by a hydrogen-selective, hydrogen-permeable membrane (i.e., membrane tube **54**) positioned on the outside of said section; the apparatus further comprising a methanation catalyst (i.e., polishing catalyst **110**) packed within said inside section to react with any trace amounts of CO present in the hydrogen **103** which permeates through said membrane **54**. It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a methanation catalyst within the inside section **11a** in the modified apparatus of Minet et al., on the basis of suitability for the intended use, because the methanation catalyst converts carbon monoxide and carbon dioxide impurities that remain in the hydrogen stream into

methane, which is considered relatively inert or innocuous to fuel cells, whereas carbon dioxide and carbon monoxide are poisonous to fuel cells, as taught by Edlund (column 5, lines 27-40).

Response to Arguments

11. Applicant's arguments filed October 26, 2005 have been fully considered but they are not persuasive. On the second page of the Remarks section (second to last paragraph), Applicant argues,

> "There is no suggestion to combine these two processes to produce the apparatus of the present invention because Mikus et al. teaches that the use of a flameless combustor process heater in a steam reformer results in higher average temperatures. (Mikus et al., p. 17 lines 24-25). The membranes of the present invention do not operate well under the higher temperatures provided bed the flameless combustor process heater in a steam reforming reactor as disclosed by Mikus et al., so it would not have been obvious for one of ordinary skill in the art to combine these two references to obtain the present invention."

Applicant then evidences that the membranes do not operate well under higher temperatures by supplying Exhibit A (Mardilovich et al.) and Exhibit B (Buxbaum et al.).

The Examiner respectfully disagrees and maintains her rejection. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Although Mikus et al. states that the use of the flameless combustor in conventional

steam reformers *can result* in higher average temperatures, the particular reaction temperatures maintained by the flameless combustor are merely process variables which depend on the intended use of the apparatus. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. *If the prior art structure is capable of performing the intended use, then it meets the claim.* In this case, Mikus et al. suggests that the flameless combustor is capable of operating under other temperature ranges, including a temperature range between 550 °C and 680 °C used for heating a dehydrogenation reaction (see page 15, line 33 to page 16, line 33). This temperature range falls within the temperature range of 300 °C to 700 °C used for conducting the "low temperature" steam reforming reaction as disclosed by Minet et al. (column 4, lines 43-51). One of ordinary skill in the art at the time the invention was made would have been properly motivated to combine the teachings of Mikus et al. with the disclosure of Minet et al. because the flameless combustor is inherently capable of performing the intended use of heating a steam reforming reaction under the disclosed "low temperature" range between 300 °C and 700 °C. A benefit of the flameless combustor is that the "flameless distributed combustion" provides a controllable heat flux into a process chamber, from a heat source which has a uniform temperature and a very low creation of NOx (see Mikus et al., page 5, lines 1-7).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

* * *

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 8:30 am - 5:30 pm M-F, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Leung
December 29, 2005

Hien Tran

HIEN TRAN
PRIMARY EXAMINER